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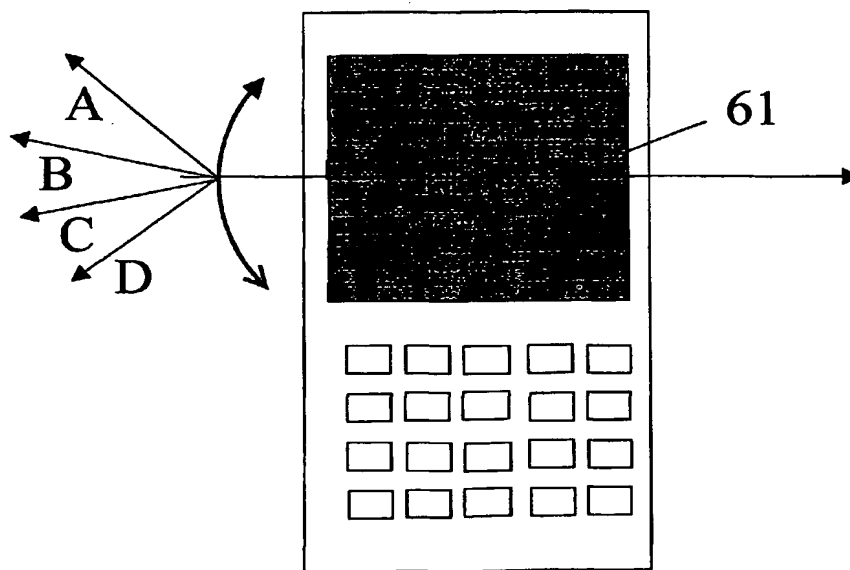
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[Continued on next page]

(54) Title: **HANDHELD DEVICE WITH A DISPLAY SCREEN**



(57) Abstract: A handheld device (1) has a display screen (2, 22), and means for displaying a document on the screen and means for scrolling through the document by tilting the device. The device comprises a splitting screen (23, 24, 61, 71) in front of the display screen (22) for splitting the image in a number of sub-images in a number of viewing zones (A,B,C,D), and in operation for each or for each or for a number of viewing zones a different part of a document is visible in a manner such that when tilting the device the parts of the document are visible in a sequential manner. The device may be tilted around a horizontal or vertical axis depending on the orientation of the splitting screen.

**Declaration under Rule 4.17:**

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)*

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10/542420

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 424 323 B2 (SIMONS PAUL R ET AL) 23 July 2002 (2002-07-23) column 1, line 37 - line 43 column 1, line 51 - line 53 column 1, line 66 - column 2, line 12 column 2, line 40 - line 44 column 2, line 54 - column 3, line 23	1-13
A	EP 0 805 389 A (SUN MICROSYSTEMS INC) 5 November 1997 (1997-11-05) the whole document	1-13
A	WO 01/27735 A (MYORIGO OY ; METSAEVAINIO JUKKA PEKKA (FI)) 19 April 2001 (2001-04-19) the whole document	1-13
-/-		

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>WO 98/14863 A (PHILIPS ELECTRONICS NV ; PHILIPS NORDEN AB (SE)) 9 April 1998 (1998-04-09) the whole document</p> <p>-----</p>	1-13

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 6424323	B2	04-10-2001	CN 1365485 T	21-08-2002
			WO 0175505 A2	11-10-2001
			EP 1272997 A2	08-01-2003
			JP 2003529794 T	07-10-2003
			US 2001026249 A1	04-10-2001
EP 0805389	A	05-11-1997	US 6624824 B1	23-09-2003
			EP 0805389 A2	05-11-1997
			JP 10049337 A	20-02-1998
WO 0127735	A	19-04-2001	FI 992191 A	13-04-2001
			FI 20001506 A	13-04-2001
			AU 7792600 A	23-04-2001
			CN 1379871 T	13-11-2002
			EP 1228422 A1	07-08-2002
			WO 0127735 A1	19-04-2001
			JP 2003511786 T	25-03-2003
			NO 20021647 A	22-05-2002
WO 9814863	A	09-04-1998	WO 9814863 A2	09-04-1998